UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

NOTICE OF ALLOWANCE AND FEE(S) DUE

	7590 04/12	2/2002						
					EXAMINER			
John L. Cordani Carmody & Torrance, LLP				<u> </u>	NICOLAS, WESLEY A			
50 Leavenworth Street P.O. Box 1110					ART UNIT	CLASS-SUBCLASS		
Waterbury, CT 06721-1110					1741	205-085000		
				DAT	E MAILED: 04/12/2002	,		
APPLICATION NO. /	FILING DATE		FIRST NAMED INVENTO	R	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/698,370	10/26/2000		Ronald Redline		2156-056A	3380		
TITLE OF INVENTION: METHOD FOR ENHANCING THE SOLDERABILITY OF A SURFACE								
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	*							
TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FI	EE TOTAL FEE(S) DUE	DATE DUE		
8	nonprovisional	NO	\$1280	\$0	\$1280	07/12/2002		

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above. If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status.

A. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

B. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and mail this form, together with applicable fee(s), to:

Box ISSUE FEE

Assistant Commissioner for Patents

Washington, D.C. 20231

ALING INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed

where appropriate. All fur ndicated unless corrected naintenance fee notification	d below or directed ou	cluding the Patent, advance nerwise in Block 1, by (a)	orders and notificati specifying a new co		,			
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 7590 04/12/2002				Note: The certificate of mailing below can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any				
				ather of	companying pane	rs. Each additional pape ave its own certificate of	er, such as a	ın assignment
John L. Cordan				Of IOIII	ai diawing, musi n	Certificate of Mailing		
Carmody & Torr				I hereb	y certify that this	Foo(s) Transmittal is	being depos	ited with the
50 Leavenworth	Street			United	States Postal Servi	ice with sufficient postage the Box Issue Fee add	e for first cl fress above	on the date
P.O. Box 1110	(721 1110			indicate	d below.			
Waterbury, CT 0	6/21-1110							(Depositor's name)
								(Signature)
						× .		(Date)
APPLICATION NO.	FILING DATE	. F	IRST NAMED INVEN	ITOR	AT	TORNEY DOCKET NO.		MATION NO.
09/698,370	10/26/2000	ANCING THE SOLDERAL	Ronald Redline			2156-056A	3	3380
		CMAY ENTITY	ISSUE FEE	PI	BLICATION FEE	TOTAL FEE(S) DUE	D/	ATE DUE
TOTAL CLAIMS	APPLN. TYPE	SMALL ENTITY	\$1280	1.0	\$0	\$1280	07	//12/2002
8	nonprovisional	NO	\$1280		•	Q 1.201		
EXA	MINER	ART UNIT	CLASS-SUBC	LASS	}			
NICOLAS	, WESLEY A	1741	205-0850	00				
Address form PTO/SI "Fee Address" indi PTO/SB/47) attached 3. ASSIGNEE NAME A	B/122) attached. cation (or "Fee Address	TA TO BE PRINTED ON The field below, no assignee dath being submitted under separations.	single firm (h attorney or ag registered pate is listed, no nan	aving as gent) and ont attorned will be or type) patent. In ion of this	nclusion of assigno	p to 2 o name 3 ce data is only appropria b titute for filing an assi	te when an a	assignment has
Please check the appropr	riate assignee category	or categories (will not be pr	inted on the patent)	O is	ndividual 🖵 corp	oration or other private g	group entity	government
4a. The following fee(s)	are enclosed:		Payment of Fee(s):					
☐ Issue Fee			A check in the amou			1 4		
D Publication Fee			☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number(enclose an extra copy of this form).					vernayment to
☐ Advance Order - #	of Copics	Do	posit Account Number	s nereby a	enc	lose an extra copy of this	form).	
The COMMISSIONER application identified ab		RADEMARKS is requested	i to apply the Issue F	ce and Pu	ublication Fce (if a	ny) or to re-apply any pi	eviously pai	id issue fee to th
(Authorized Signature)		(Date)						
other than the application interest as shown by the Burden Hour Statement depending on the need to complete this form and Trademark Office FORMS TO THIS.	ant; a registered attorning records of the United nt: This form is estimated as of the individual case	(if required) will not be ac ey or agent; or the assign States Patent and Tradema ed to take 0.2 hours to com. Any comments on the am Chief Information Officer, 231. DO NOT SEND FEE ES AND THIS FORM	rk Office. plete. Time will vary ount of time required United States Paten	y d				
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		CIDCT NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORIES BOOKES		
09/698,370	10/26/2000	Ronald Redline	2156-056A	3380	
07/070,570			EXAMINI	ER	
7590 04/12/2002 John L. Cordani			NICOLAS, WESLEY A		
Carmody & Torrance, LLP			ART UNIT	PAPER NUMBER	
50 Leavenworth Street P.O. Box 1110			1741		
Waterbury, CT 06	721-1110		DATE MAILED: 04/12/2002		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 107 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 107 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

	Application	No.	Applicant(s)			
Nation of Allowahility	09/698,370		REDLINE ET AL.			
Notice of Allowability	Examiner		Art Unit			
	Wesley A. N	icolas	1741			
The MAILING DATE of this communication appearable allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOT the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAIN or other appro GHTS. This a	S) CLOSED in this app opriate communication application is subject to	lication. If not include will be mailed in due	ed course. THIS		
 This communication is responsive to The allowed claim(s) is/are <u>9-16</u>. The drawings filed on are accepted by the Examine Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the: Certified copies of the priority documents have 	ler 35 U.S.C.	d.		,		
2. Certified copies of the priority documents have						
3. Copies of the certified copies of the priority documents have been received in this national stage application from the						
International Bureau (PCT Rule 17.2(a)).						
* Certified copies not received:	adar 25 11 C C	£ 110(a) (to a provincia				
5. Acknowledgment is made of a claim for domestic priority up (a) The translation of the foreign language provisional a		. , , , ,	onal application).			
6. Acknowledgment is made of a claim for domestic priority up	• •					
o. 23 Acknowledgment is made of a claim for domestic priority di	idei 33 0.3.0	. 33 120 aliu/01 121.		,		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of						
7. A SUBSTITUTE OATH OR DECLARATION must be subminFORMAL PATENT APPLICATION (PTO-152) which gives reas				IOTICE OF		
 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No. (b) including changes required by the proposed drawing of including changes required by the attached Examiner 	correction filed	, which has be	en approved by the E			
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.						
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR T				lote the		
Attachment(s)						
 1 ☐ Notice of References Cited (PTO-892) 3 ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5 ☐ Information Disclosure Statements (PTO-1449), Paper No. 30 7 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	<u>\$.4</u> .	2☐ Notice of Informa 4☐ Interview Summa 6☐ Examiner's Amen 8☑ Examiner's States 9☐ Other	ry (PTO-413), Paper idment/Comment	No		

Art Unit: 1741

DETAILED ACTION

Allowable Subject Matter

- 1. Claims 9-16 are allowed over the prior art of record.
- 2. The following is an examiner's statement of reasons for allowance:

The specific process for improving the solderability of a metal surface which includes, *inter alia*, contacting the metal surface with an immersion silver plating solution thereby producing an immersion silver plate upon the metal surface, and thereafter treating the silver plated metal surface with a solution comprising an additive selected from the group consisting of fatty amines, fatty amides, quaternary salts, amphoteric salts, resinous amines, resinous amides, fatty acids, resinous acids, ethoxylated versions of any of the foregoing, and mixtures of any of the foregoing was not taught or suggested by the prior art of record.

With respect to the prior art of record, the reference of Wakita teaches the enhancement of solderability using silver plated copper powder and the addition of fatty acids to increase the dispersion, however the additives are added to the plating solution and are not used as a subsequent treatment after the layer is formed. The prior art of Ferrier (EP 0 797 380 A1) although it teaches of silver immersion plating, is silent with respect to subsequent treatment with a solution using an additive as claimed by Applicant.

Art Unit: 1741

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 09/698,370

Art Unit: 1741

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Wesley Nicolas whose telephone number is (703)305-

0082. The examiner can normally be reached on Mon.-Thurs. from 7am to 5pm.

The Supervisory Primary Examiner for this Art Unit is Roy King whose telephone

number is (703) 308-1146.

The fax number for this Group is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group receptionist whose telephone number is

(703)308-0661.

Wesley Nicolas

April 2, 2002

BRUCE F. BELL
PRIMARY EXAMINER

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GROUP 1700